

West Virginia Department of Environmental Protection  
Division of Air Quality

*Earl Ray Tomblin*  
Governor

*Randy C. Huffman*  
Cabinet Secretary

# Permit to Operate



Pursuant to  
**Title V**  
of the Clean Air Act

*Issued to:*  
**Cranberry Pipeline Corporation**  
**Danville Compressor Station**  
**R30-00500020-2011**

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*John A. Benedict*  
Director

*Expiration:* *Issued: Draft/Proposed* • *Effective: [Equals issue date plus two weeks]*  
*[5 years after issuance date]* • *Renewal Application Due: [6 months prior to expiration]*

Permit Number: **R30-00500020-2011**  
Permittee: **Cranberry Pipeline Corporation**  
Facility Name: **Danville Compressor Station**  
Permittee Mailing Address: **Suite 401, Five Penn Center West**  
**Pittsburgh, Pa 15276-0120**

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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|---------------------------|---|
| Facility Location:        | Danville, Boone County, West Virginia             |
| Facility Mailing Address: | Lick Creek Road, Danville, WV 25053               |
| Telephone Number:         | (304) 369-1771                                    |
| Type of Business Entity:  | Corporation                                       |
| Facility Description:     | Natural Gas Production Facility                   |
| SIC Codes:                | 1311  |
| UTM Coordinates:          | 422.07 km Easting • 4214.25 km Northing • Zone 17 |

Permit Writer: U.K.Bachhawat

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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## 1.0 Emission Units and Active R13, R14, and R19 Permits

### 1.1 Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description                                     | Year Installed | Design Capacity   | Control Device |
|------------------|-------------------|---|----------------|-------------------|----------------|
| #1*              | 001-02            | Cooper Reciprocating Engine, 2SLB                             | 1957           | 400 HP            | N/A            |
| #2*              | 001-03            | Cooper Reciprocating Engine, 2SLB                             | 1957           | 400 HP            | N/A            |
| #3*              | 001-05            | Cooper Reciprocating Engine, 2SLB                             | 1957           | 400 HP            | N/A            |
| #4*              | 001-06            | Cooper Reciprocating Engine, 2SLB                             | 1980           | 800 HP            | N/A            |
| CE-5*            | 001-10            | Caterpillar G3512TALE lean burn four stroke Compressor Engine | 2004           | 810 HP            | N/A            |
| CE-6*            | 001-11            | Caterpillar G3512TALE lean burn four stroke Compressor Engine | 2004           | 810 HP            | N/A            |
| Reboiler* (RB1)  | 001-04            | Dehydrator Reboiler   | 2004           | 0.75 MMBtu/hr     | N/A            |
| Dehy*            | 001-09            | Triethylene Glycol Dehydrator                                 | 2004           | 25 MMscf/day      | Flare (F1)     |
| 1C* (F1)         | 001-09            | Model No. 630 Flare   | 2005           | 907,700 Btu/hr    | N/A            |
| TKO-1            | TKO-1             | Northwest Lot 50 Barrel Tank                                  | App. 2005      | App. 2000 gallons | N/A            |
| TKO-2            | TKO-2             | Northwest Lot 50 Barrel Tank                                  | App. 2005      | App. 2000 gallons | N/A            |
| EG-1*            | EG-1E             | Kohler 100REZG Generator with GM 8.1L Engine, 4SLB            | 2010           | 155.2 hp          | EG-1C          |
| EG-1C            | EG-1E             | Kohler Three-Way Catalytic Converter, 4SLB                    | 2010           | N/A               | N/A            |

\* This equipment burns or combusts pipeline quality natural gas only.

Note: 2SLB means 2 Stroke Lean Burn.

### 1.2 Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

| Permit Number | Date of Issuance |
|---------------|------------------|
| R13-2585B     | 02/26/2010       |

## 2.0 General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

### 2.2. Acronyms

|                                       |   |                        |   |
|---------------------------------------|---|------------------------|---|
| <b>CAAA</b>                           | Clean Air Act Amendments                                  | <b>NSPS</b>            | New Source Performance                        |
| <b>CBI</b>                            | Confidential Business Information                         |                        | Standards                                     |
| <b>CEM</b>                            | Continuous Emission Monitor                               | <b>PM</b>              | Particulate Matter                            |
| <b>CES</b>                            | Certified Emission Statement                              | <b>PM<sub>10</sub></b> | Particulate Matter less than 10µm in diameter |
| <b>C.F.R. or CFR</b>                  | Code of Federal Regulations                               |                        |   |
| <b>CO</b>                             | Carbon Monoxide   | <b>pph</b>             | Pounds per Hour                               |
| <b>C.S.R. or CSR</b>                  | Codes of State Rules                                      | <b>ppm</b>             | Parts per Million                             |
| <b>DAQ</b>                            | Division of Air Quality                                   | <b>PSD</b>             | Prevention of Significant Deterioration       |
| <b>DEP</b>                            | Department of Environmental Protection                    | <b>psi</b>             | Pounds per Square Inch                        |
| <b>FOIA</b>                           | Freedom of Information Act                                | <b>SIC</b>             | Standard Industrial Classification            |
| <b>HAP</b>                            | Hazardous Air Pollutant                                   |                        |   |
| <b>HON</b>                            | Hazardous Organic NESHAP                                  | <b>SIP</b>             | State Implementation Plan                     |
| <b>HP</b>                             | Horsepower  | <b>SO<sub>2</sub></b>  | Sulfur Dioxide                                |
| <b>lbs/hr or lb/hr</b>                | Pounds per Hour   | <b>TAP</b>             | Toxic Air Pollutant                           |
| <b>LDAR</b>                           | Leak Detection and Repair                                 | <b>TPY</b>             | Tons per Year                                 |
| <b>m</b>                              | Thousand  | <b>TRS</b>             | Total Reduced Sulfur                          |
| <b>MACT</b>                           | Maximum Achievable Control Technology                     | <b>TSP</b>             | Total Suspended Particulate                   |
|                                       |   | <b>USEPA</b>           | United States Environmental Protection Agency |
| <b>mm</b>                             | Million   |                        |   |
| <b>mmBtu/hr</b>                       | Million British Thermal Units per Hour                    | <b>UTM</b>             | Universal Transverse Mercator                 |
| <b>mmft<sup>3</sup>/hr or mmcf/hr</b> | Million Cubic Feet Burned per Hour                        | <b>VEE</b>             | Visual Emissions Evaluation                   |
| <b>NA or N/A</b>                      | Not Applicable  |                        |   |
| <b>NAAQS</b>                          | National Ambient Air Quality Standards                    | <b>VOC</b>             | Volatile Organic Compounds                    |
| <b>NESHAPS</b>                        | National Emissions Standards for Hazardous Air Pollutants |                        |   |
| <b>NO<sub>x</sub></b>                 | Nitrogen Oxides   |                        |   |

### **2.3. Permit Expiration and Renewal**

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.  
**[45CSR§30-5.1.b.]**
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.  
**[45CSR§30-4.1.a.3.]**
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.  
**[45CSR§30-6.3.b.]**
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.  
**[45CSR§30-6.3.c.]**

### **2.4. Permit Actions**

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
**[45CSR§30-5.1.f.3.]**

### **2.5. Reopening for Cause**

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
  - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.  
**[45CSR§30-6.6.a.]**

## **2.6. Administrative Permit Amendments**

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.  
[45CSR§30-6.4.]

## **2.7. Minor Permit Modifications**

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.  
[45CSR§30-6.5.a.]

## **2.8. Significant Permit Modification**

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.  
[45CSR§30-6.5.b.]

## **2.9. Emissions Trading**

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.  
[45CSR§30-5.1.h.]

## **2.10. Off-Permit Changes**

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
  - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
  - c. The change shall not qualify for the permit shield.
  - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
  - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9.]**

## **2.11. Operational Flexibility**

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

**[45CSR§30-5.8]**

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

**[45CSR§30-5.8.a.]**

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

**[45CSR§30-2.39]**



## **2.12. Reasonably Anticipated Operating Scenarios**

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

**[45CSR§30-5.1.i.]**

## **2.13. Duty to Comply**

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**[45CSR§30-5.1.f.1.]**

## **2.14. Inspection and Entry**

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
  - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

**[45CSR§30-5.3.b.]**

## **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

**[45CSR§30-5.3.d.]**

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

**[45CSR§30-5.1.f.2.]**

## **2.17. Emergency**

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

**[45CSR§30-5.7.a.]**

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

**[45CSR§30-5.7.b.]**

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

**[45CSR§30-5.7.c.]**

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

**[45CSR§30-5.7.d.]**

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**[45CSR§30-5.7.e.]**

## **2.18. Federally-Enforceable Requirements**

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

**[45CSR§30-5.2.a.]**

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## **2.19. Duty to Provide Information**

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

**[45CSR§30-5.1.f.5.]**

## **2.20. Duty to Supplement and Correct Information**

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

**[45CSR§30-4.2.]**

## **2.21. Permit Shield**

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and

are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

**[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

**[45CSR§30-5.6.c.]**

## **2.22. Credible Evidence**

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

**[45CSR§30-5.3.e.3.B. and 45CSR38]**

## **2.23. Severability**

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

**[45CSR§30-5.1.e.]**

## **2.24. Property Rights**

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

**[45CSR§30-5.1.f.4]**

## **2.25. Acid Deposition Control**

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

**[45CSR§30-5.1.d.]**

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

**[45CSR§30-5.1.a.2.]**

### 3.0 Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.  
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
- [40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

[45CSR§17-3.1; State Enforceable Only]

- 3.1.10. *Operation and Maintenance of Air Pollution Control Equipment.* The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13, R13-2585, 4.1.1]

### 3.2. Monitoring Requirements

N/A

### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any

testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
  1. The permit or rule evaluated, with the citation number and language.
  2. The result of the test for each permit or rule condition.
  3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

### **3.4. Recordkeeping Requirements**

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.] [45CSR13, R13-2585, 4.2.1 and 9.4.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]



3.4.4. *Record of Maintenance of Air Pollution Control Equipment.* For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.  
**[45CSR13, R13-2585B, 4.2.2 and 9.4.2]**

3.4.5. *Record of Malfunctions of Air Pollution Control Equipment.* For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
  - f. Steps taken to correct the malfunction.
  - g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- [45CSR13, R13-2585, 4.2.3 and 9.4.3]**

### **3.5. Reporting Requirements**

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.  
**[45CSR§§30-4.4. and 5.1.c.3.D.]**

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.  
**[45CSR§30-5.1.c.3.E.]**

- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
  
Phone: 304/926-0475  
FAX: 304/926-0478

**If to the US EPA:**

Associate Director  
Office of Enforcement and Permits Review  
(3AP12)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.  
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: [R3\\_APD\\_Permits@epa.gov](mailto:R3_APD_Permits@epa.gov). The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.  
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.  
[45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

**3.5.8. Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
  1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
  2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
  3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
  4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

**[45CSR§30-5.1.c.3.C.]**

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

**[45CSR§30-5.1.c.3.B.]**

- 3.5.9. New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

**[45CSR§30-4.3.h.1.B.]**

**3.6. Compliance Plan**

N/A

**3.7. Permit Shield**

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met. N/A

### **3.8. Emergency Operating Scenario**

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

- a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
- b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;
- c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;
- d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;
- e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:
  - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
  - ii. Identification of the engine(s) being temporarily replaced;
  - iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
  - iv. Projected duration of the replacement engine(s); and
  - v. The appropriate certification by a responsible official.

**[45CSR§30-12.7]**

## 4.0 Reciprocating Internal Combustion Engines [CE-5, CE-6]

### 4.1. Limitations and Standards

- 4.1.1. The emissions from the Caterpillar G3512TALE 810 horsepower lean burn four stroke natural gas fired engine (Source ID CE-5, Emission Point ID 001-10) shall not exceed the following:

| Pollutant        |              | Maximum Emission Rate |        |
|------------------|--------------|-----------------------|--------|
|                  |              | lb/hr                 | ton/yr |
| CO               |              | 3.0                   | 13.1   |
| NO <sub>x</sub>  |              | 3.7                   | 16.4   |
| PM <sub>10</sub> |              | 0.1                   | 0.1    |
| SO <sub>2</sub>  |              | 0.1                   | 0.1    |
| VOCs             |              | 0.9                   | 3.9    |
| HAPs             | Benzene      | 0.1                   | 0.2    |
|                  | Formaldehyde | 0.3                   | 1.5    |

[45CSR13, R13-2585, 7.1.1]

- 4.1.2. The Caterpillar G3512TALE 810 horsepower lean burn four stroke natural gas fired engine (Source CE-5, Emission Point ID 001-10) shall not exceed a consumption limit of 6,156 cubic feet of natural gas per hour and 53,926,560 cubic feet of natural gas per year. Compliance with the annual limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous twelve (12) months.

[45CSR13, R13-2585, 7.1.2]

- 4.1.3. The emissions from the Caterpillar G3512TALE 810 horsepower lean burn four stroke natural gas fired engine (Source ID CE-6, Emission Point ID 001-11) shall not exceed the following:

| Pollutant        |              | Maximum Emission Rate |        |
|------------------|--------------|-----------------------|--------|
|                  |              | lb/hr                 | ton/yr |
| CO               |              | 3.0                   | 13.1   |
| NO <sub>x</sub>  |              | 3.7                   | 16.4   |
| PM <sub>10</sub> |              | 0.1                   | 0.1    |
| SO <sub>2</sub>  |              | 0.1                   | 0.1    |
| VOCs             |              | 0.9                   | 3.9    |
| HAPs             | Benzene      | 0.1                   | 0.2    |
|                  | Formaldehyde | 3.0                   | 1.5    |

[45CSR13, R13-2585, 7.1.3]

- 4.1.4. The Caterpillar G3512TALE 810 horsepower lean burn four stroke natural gas fired engine (Source ID CE-6, Emission Point ID 001-11) shall not exceed a consumption limit of 6,156 cubic feet of natural gas per hour and 53,926,560 cubic feet of natural gas per year. Compliance with the annual limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous twelve (12) months.  
[45CSR13, R13-2585, 7.1.4]

#### **4.2. Monitoring Requirements**

- 4.2.1. The permittee shall monitor the amount of natural gas consumed and the hours of operation on a monthly and annual basis. Compliance with the annual total shall be based on a 12-month rolling total.  
[45CSR13, R13-2585, 7.2.1]

#### **4.3. Testing Requirements**

Please see Facility-wide testing requirements.

#### **4.4. Recordkeeping Requirements**

- 4.4.1. (To) demonstrate compliance with the throughput limits set forth in section 4.1.2 and 4.1.4 and the emission limits set forth in sections 4.1.1 and 4.1.3, the permittee shall maintain records of the amount of natural gas consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or at the appropriate district or corporate office for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.  
[45CSR13, R13-2585, 7.4.1]

#### **4.5. Reporting Requirements**

Please see Facility-wide reporting requirements.

#### **4.6. Compliance Plan**

N/A

## 5.0 Reboiler [001-04]

### 5.1. Limitations and Standards

- 5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

**[45CSR§2-3.1] [45CSR13, R13-2585, 5.1.1]**

- 5.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 (Section 5.1.1. of this permit) shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1 (Section 5.1.1 of this permit). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

**[45CSR§2-3.2] [45CSR13, R13-2585, 5.1.2]**

- 5.1.3. The emission from the Dehydrator Reboiler (Source Reboiler, Emission Point ID 001-04) shall not exceed the following:

| Pollutant        | Maximum Emission Rate |        |
|------------------|-----------------------|--------|
|                  | lb/hr                 | ton/yr |
| CO               | 0.1                   | 0.4    |
| NO <sub>x</sub>  | 0.1                   | 0.5    |
| PM <sub>10</sub> | 0.1                   | 0.1    |
| SO <sub>2</sub>  | 0.1                   | 0.1    |
| VOCs             | 0.1                   | 0.1    |

**[45CSR13, R13-2585, 5.1.3] [Reboiler]**

- 5.1.4. The Dehydrator Reboiler shall not consume more than 1,072 cubic feet of natural gas per hour and 9,385,714 cubic feet of natural gas per year. Compliance with the annual limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous twelve (12) months.

**[45CSR13, R13-2585, 5.1.4] [Reboiler]**

- 5.1.5. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10-4.1.a through 45CSR§10-4.1.e.

**[45CSR§10-4.1] [Reboiler]**

- 5.1.6. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be

economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.

**[45CSR§10-5.1]**

## **5.2. Monitoring Requirements**

- 5.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct visible emissions observations for the purpose of demonstrating compliance with Section 5.1.1. If visible emissions are observed, the permittee shall conduct a Method 9 reading unless the cause for visible emissions is corrected within 24 hours.

**[45CSR13, R13-2585, 5.2.1] [Reboiler]**

- 5.2.2. The permittee shall monitor the amount of natural gas combusted in the reboiler and the hours of operation of the reboiler, designated Reboiler, on a monthly and annual basis.

**[45CSR13, R13-2585, 5.2.2] [Reboiler]**

- 5.2.3. To show compliance with Section 5.1.5 & 5.1.6, the owner or operator may elect not to monitor the total sulfur content of the fuel combusted, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. § 60.331(u). The owner or operator shall use one of the following sources of information to make the required demonstration:

The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 C.F.R.75 is required.

**[45CSR§30-5.1.c.]**

## **5.3. Testing Requirements**

Please see facility wide Testing Requirements.

## **5.4. Recordkeeping Requirements**

- 5.4.1. To demonstrate compliance with the throughput limits and the emission limits set forth in section 5.1.3. and 5.1.4., the permittee shall maintain monthly and annual records of the amount of natural gas consumed by the reboiler and monthly and annual records of the hours of operation of the reboiler. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.

**[45CSR13, R13-2585, 5.4.1]**

- 5.4.2. To demonstrate compliance with section 5.1.1., the permittee shall maintain records of monthly visible observations conducted. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.

**[45CSR13, R13-2585, 5.4.2]**

## **5.5. Reporting Requirements**

Please see facility wide Reporting Requirements

## **5.6. Compliance Plan**

N/A



## **6.0 Dehy (001-09), Flare (1C, 001-09)**

### **6.1. Limitations and Standards**

In Section 6.1 of this permit “this section” means 40 C.F.R. §60.18; “this part” means 40 C.F.R. 60; “this subpart” means 40 C.F.R. 60 subpart A.

6.1.1. Flares shall be designed for and operated with no visible emissions as determined by the methods specified in 40 C.F.R. §60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. This streamlined limit of no visible emissions will ensure compliance with 45CSR§6-4.3. During the exception period when visible emissions are allowed, the visible emissions shall not exceed 20% opacity except for periods of start-up as outlined in 45CSR§6-4.4. (i.e., less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up).  
**[40 C.F.R. §60.18(c)(1), 45CSR§6-4.3 and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.1]**

6.1.2. Flares shall be operated with a flame present at all times, as determined by the methods specified in 40 C.F.R. §60.18(f).  
**[40 C.F.R. §60.18(c)(2) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.2]**

6.1.3. An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3) of this section and the maximum tip velocity specification in paragraph (c)(4) of this section, or adhering to requirements in paragraph (c)(3)(i) of this section.  
**[40 C.F.R. §60.18(c)(3) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.3]**

6.1.4. Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen control of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity,  $V_{max}$ , as determined by the following equation:

$$V_{max} = (X_{H_2} - K_1) * K_2$$

Where:

$V_{max}$  = Maximum permitted velocity, m/sec.

$K_1$  = Constant, 6.0 volume-percent hydrogen.

$K_2$  = Constant, 3.9 (m/sec)/volume-percent hydrogen.

$X_{H_2}$  = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Meter (ASTM) Method D1946-77. (Incorporated by reference as specified in 40 C.F.R. §60.17).

**[40 C.F.R. §60.18(c)(3)(i)(A) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.4]**

6.1.5. The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section. **[40 C.F.R. §60.18(c)(3)(i)(B) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.5]**

6.1.6. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.  
**[40 C.F.R. §60.18(c)(3)(ii) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.6]**

6.1.7. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as

determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) listed below.

**[40 C.F.R. 60.18(c)(4)(i) and 45CSR§16.4.1] [45CSR13, R13-2585, 6.1.7]**

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

**[40 C.F.R. 60.18(c)(4)(ii) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.7]**

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than the velocity,  $V_{max}$ , as determined by the method specified in paragraph (f)(5) of this section, and less than 122 m/sec (400 ft/sec) are allowed.

**[40 C.F.R. 60.18(c)(4)(iii) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.7]**

6.1.8. Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

**[40 C.F.R. §60.18(c)(6) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.8]**

6.1.9. Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

**[40 C.F.R. §60.18(d) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.9]**

6.1.10. Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

**[40 C.F.R. §60.18(e) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.10]**

6.1.11. Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

**[40 C.F.R. §60.18(f)(1) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.11]**

6.1.12. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

**[40 C.F.R. §60.18(f)(2) and 45CSR§16-4.1.] [45CSR13, R13-2585, 6.1.13]**

6.1.13. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity: Factor F

A. Less than 15,000 lbs/hr 5.43

B. 15,000 lbs/hr or greater 2.72

*Calculation for PM Emissions:*

C1:

$$(5.43) \times (524 \frac{lb}{hr}) \times (\frac{ton}{2000lb}) = 0.142 \frac{lb}{hr}$$

**[45CSR§6-4.1] [45CSR13, R13-2585, 6.1.14]**

- 6.1.14. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.  
**[45CSR§6-4.5] [45CSR13, R13-2585, 6.1.15]**
- 6.1.15. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.  
**[45CSR§6-4.6] [45CSR13, R13-2585, 6.1.16]**
- 6.1.16. The flare shall be operated at all times when the glycol dehydration/still column and reboiler, RB1 unit is operational.  
**[45CSR13, R13-2585, 6.1.17]**
- 6.1.17. The flare shall be operated with a flame present at all times. For the flare, a continuous heat sensing monitoring device with a continuous recorder that indicates the continuous ignition of the pilot flame must be installed, calibrated, operated, and maintained so that it will re-ignite the pilot flame or shut off gas flow to the main burner if the thermocouple senses the loss of pilot flame.  
**[45CSR13, R13-2585, 6.1.18]**
- 6.1.18. The permitted shall not exceed an assist gas (natural gas) throughput of 1,010 cubic feet of natural gas per hour and 8,847,600 cubic feet of natural gas per year to the flare, designated as 1C.  
**[45CSR13, R13-2585, 6.1.19]**
- 6.1.19. The Glycol Dehydrator shall not exceed a wet natural gas throughput rate of 1.04 million cubic feet per hour 9,125 million standard cubic feet per year.  
**[45CSR13, R13-2585, 6.1.20]**
- 6.1.20. Emissions from the Flare, F1, shall not exceed the following limits:

| Emissions Point ID No. | Pollutant       | Maximum Emission Rate |       |
|------------------------|-----------------|-----------------------|-------|
|                        |                 | lb/hr                 | tpy   |
| F1                     | NO <sub>x</sub> | 0.04                  | 0.18  |
|                        | CO              | 0.10                  | 0.44  |
|                        | VOC             | 0.20                  | 0.80  |
|                        | PM              | 0.01                  | 0.04  |
|                        | SO <sub>2</sub> | 0.01                  | 0.01  |
|                        | Benzene         | 0.0032                | 0.014 |
|                        | Hexane          | 0.002                 | 0.009 |
|                        | Toluene         | 0.005                 | 0.02  |
|                        | Xylene          | 0.005                 | 0.02  |

**[45CSR13, R13-2585, 6.1.21]**

Note: Compliance with PM limit of 0.01 lb/hr shall show compliance with PM limit of 0.142 lb/hr in section 6.1.13

- 6.1.21. The owner or operator of an affected area source that is not located in an Urban-1 county, as defined in 40

C.F.R. §63.761, the construction or reconstruction of which commences before July 8, 2005, shall achieve compliance with the provisions of this subpart no later than the dates specified in paragraph (ii) of this section, except as provided for in 40 C.F.R. §63.6(i).

(ii) If the affected area source is not located within any UA plus offset and UC boundary, as defined in §63.761, the compliance date is January 5, 2009.

**[40 C.F.R. §63.760(f)(5)] [F1, DEHY]**

6.1.22. 40 C.F.R. §63.764 *General standards.* (Note: The following section numbers match those of 40 C.F.R. §63.764)

(a) Table 2 of the Part 63 Subpart HH specifies the provisions of subpart A (General Provisions) of Part 63 that apply and those that do not apply to owners and operators of affected sources subject to this subpart.

(b) All reports required under this subpart shall be sent to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. Reports may be submitted on electronic media.

(d) Except as specified in paragraph (e)(1) of this requirement, the owner or operator of an affected source located at an existing or new area source of HAP emissions shall comply with the applicable standards specified in paragraph (d) of this section.

(2) Each owner or operator of an area source not located in a UA plus offset and UC boundary (as defined in 40 C.F.R. §63.761) shall comply with paragraphs (d)(2)(i) through (iii) of this requirement.

(i) Determine the optimum glycol circulation rate using the following equation:

$$L_{OPT} = 1.15 * 3.0 \frac{\text{gal TEG}}{\text{lb H}_2\text{O}} * \left( \frac{F * (I - O)}{24 \text{ hr/day}} \right)$$

Where:

$L_{OPT}$  = Optimal circulation rate, gal/hr.

F = Gas flowrate (MMSCF/D).

I = Inlet water content (lb/MMSCF).

O = Outlet water content (lb/MMSCF).

3.0 = The industry accepted rule of thumb for a TEG-to water ratio (gal TEG/lb H<sub>2</sub>O).

1.15 = Adjustment factor included for a margin of safety.

(ii) Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with paragraph (d)(2)(i) of this section. If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with paragraph (d)(2)(i), the owner or operator must calculate an alternate circulation rate using GRI-GLYCalc™, Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with 40 C.F.R. §63.775(c)(7).

(iii) Maintain a record of the determination specified in paragraph (d)(2)(ii) in accordance with the requirements in 40 C.F.R. §63.774(f) and submit the Initial Notification in accordance with the requirements in 40 C.F.R. §63.775(c)(7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with paragraph (d)(2)(i) or (ii) of this section and submit the information specified under 40 C.F.R. §63.775(c)(7)(ii) through (v).

(e) *Exemptions.* (1) The owner or operator is exempt from the requirements of paragraph (d) of this section if the criteria listed in paragraph (e)(1)(ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in 40 C.F.R. §63.774(d)(1).

(ii) The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year (1 ton/yr), as determined by the procedures specified in 40 C.F.R. §63.772(b)(2).

**[40 C.F.R. §63.764(a), (b), (d), (e)] [F1, DEHY]**

- 6.1.23. If the annual emissions of benzene from the dehydration unit ever equals or exceeds 0.90 megagram per year (1 tpy) as calculated per 40 C.F.R. §63.772(b)(2) (requirement 6.3.2), the permittee shall comply with section d(2)(i) through (iii) of 40 C.F.R. §63.764 (requirement 6.1.22).

**[45CSR§30-5.1.c] [F1, DEHY]**

## **6.2. Monitoring Requirements**

- 6.2.1. The flare pilot flame will be continuously monitored by a thermocouple connected to the control room to detect the absence of a pilot flame.  
**[45CSR13, R13-2585, 6.2.1]**
- 6.2.2. Visual emission checks of the Flare, F1 (1C), subject to an opacity limit shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions. The visual emissions checks shall be conducted monthly. If visible emissions are identified during the survey, or at any other time, the permittee shall take corrective action to minimize the emissions immediately. If during these checks, or at any other time, visible emissions are observed, a visible emission evaluation shall be conducted in accordance with 40 C.F.R 60 Appendix A, Method 9. A Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner.  
**[45CSR13, R13-2585, 6.2.2]**
- 6.2.3. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system and the operating hours of the dehydration system on a monthly and annual basis. Compliance with the annual total shall be based on a 12-month rolling total.  
**[45CSR13, R13-2585, 6.2.3]**
- 6.2.4. The permittee shall monitor the throughput of assist gas (natural gas) fed to the flare and the hours of operation of the flare on a monthly and annual basis. Compliance with the annual total shall be based on a 12-month rolling total.  
**[45CSR13, R13-2585, 6.2.4]**
- 6.2.5. In order to demonstrate compliance with the area source status, as well as the 1 ton per year benzene exemption provided under 6.1.22(e)(1)(ii) using GRI-GLYCalc V3 or higher, the dehydration system must be accurately defined by monitoring and recording actual operating parameters associated with the dehydration system. These parameters shall be measured periodically, with the exception of wet gas

composition, in order to define annual average values or, if monitoring is not practical, some parameters may be assigned default values as listed below. Periodically, shall be interpreted as sufficient enough to reflect annual variation and, therefore, this term is operating parameter and site dependent.

The WV Division of Air Quality requires the following actual operating parameters be measured or assumed to equal the default values listed below in order to satisfy this monitoring requirement when using the Gas Analysis and Process Data, GLYCalc emission modeling method:

- Natural Gas Flowrate:
  - number of days operated per year,
  - annual daily average (MMscf/day), and
  - maximum design capacity (MMscf/day)
- Absorber temperature and pressure
- Lean glycol circulation rate
- Glycol pump type
- Flash tank temperature and pressure, if applicable
- Stripping Gas flow rate, if applicable
- Wet gas composition (upstream of the absorber – dehydration column) Sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc Technical Reference User Manual and Handbook V4.

The following operating parameter(s) may be assigned default values when using GRI-GLYCalc:

- Dry Gas water content at a point directly after exiting the dehydration column and before any additional separation points or assume pipeline quality at 7 lb H<sub>2</sub>O / MMscf.
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI.
- Lean glycol circulation rate may be estimated using the recirculation ratio of 3 gal TEG / lb H<sub>2</sub>O removed.

**[45CSR§30-5.1.c][F1, DEHY]**

- 6.2.6. To comply with section 6.1.6, the permittee shall monitor the assist gas (natural gas) flow rate to the flare. Assist gas (natural gas) flow rate fed to the flare shall not be less than 7000 scfd. Assist gas (natural gas) flow rate fed to the flare shall be monitored daily by reading the natural gas flow meter.

**[45CSR§30-5.1.c.1.B][F1]**

### **6.3. Testing Requirements**

- 6.3.1. Within the 3<sup>rd</sup> year of this permit term, the permittee shall determine the composition of the wet natural gas by sampling in accordance with GPA Method 2166 and analyzing according to extended GPA Method 2286 analysis as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.

**[45CSR§30-5.1.c]**

- 6.3.2. The following testing and compliance provisions of 40 C.F.R. Part 63 Subpart HH *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities* are applicable to the facility:

40 C.F.R. § 63.772 *Test methods, compliance procedures, and compliance demonstrations* (Note: The following section numbers match those of 40 C.F.R. §63.772)

(b) *Determination of glycol dehydration unit flowrate or benzene emissions.* The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate or benzene emissions to meet the criteria for an exemption from control requirements under 40 C.F.R. §63.764(e)(1) (requirement 6.1.22).

(2) The determination of actual average benzene emissions from a glycol dehydration unit shall be made using the procedures of paragraph (b)(2)(i) of this requirement. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

(i) The owner or operator shall determine actual average benzene emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit.

*Compliance with this monitoring and testing requirement shall be streamlined by demonstrating compliance with the monitoring specified within 6.2.5 and the testing provision of 6.3.1.*

**[40 C.F.R. §63.772 (b)(2)(i)] [DEHY, F1]**

#### **6.4. Recordkeeping Requirements**

6.4.1. The permittee shall maintain a record of the wet natural gas throughput through the dehydration system and hours of operation to demonstrate compliance with section 6.1.19 of this permit. Said records shall be maintained on site or at the appropriate district or corporate office for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.

**[45CSR13, R13-2585, 6.4.1]**

6.4.2. For the purpose of demonstrating compliance with the limit set forth in section 6.1.2, 6.1.10, 6.1.12, 6.1.16, and 6.1.17, the permittee shall maintain a continuous record of the times and duration of all periods during which the pilot flame was absent. Said records shall be maintained on site or at the appropriate district or corporate office for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.

**[45CSR13, R13-2585, 6.4.2]**

6.4.3. For the purpose of demonstrating compliance with the limit set forth in 6.1.8., the permittee shall maintain a record of the flare design (i.e. steam assisted, air assisted, or nonassisted). Said records shall be maintained on site or at the appropriate district or corporate office for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.

**[45CSR13, R13-2585, 6.4.3]**

6.4.4. For the purpose of demonstrating compliance with the limit set forth in 6.1.1 and 6.1.11, the permittee shall maintain monthly records of visible emission observations conducted. Said records shall be maintained on site or at the appropriate district or corporate office for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.

**[45CSR13, R13-2585, 6.4.4]**

6.4.5. For the purpose of demonstrating compliance with the limits set forth in 6.1.3 through 6.1.7, the permittee shall maintain records of the initial heat content determinations, flow rate measurements, and exit velocity determinations made during the initial compliance determination. Said records shall be maintained on site or at the appropriate district or corporate office for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.  
**[45CSR13, R13-2585, 6.4.5]**

6.4.6. For the purpose of documenting compliance with the emission limitations, HAP major source thresholds, as well as the 1 ton per year benzene exemption, the permittee shall maintain records of all monitoring data, wet gas sampling, and annual GLYCalc emission estimates.  
**[45CSR§30-5.1.c] [DEHY, F1]**

6.4.7. (Note: The following section numbers match those of 40 C.F.R. §63.774)  
(d)(1) An owner or operator of a glycol dehydration unit that meets the exemption criteria in 40 C.F.R. §63.764(e)(1)(ii) (Section 6.1.22 of this permit) shall maintain the records specified in paragraph (d)(1)(ii) of this section for that glycol dehydration unit.  
(ii) The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with 40 C.F.R. §63.772(b)(2) (Section 6.3.2 of this permit)

**[40 C.F.R. §63.774] [DEHY, F1]**

6.4.8. For the purpose of demonstrating compliance with section 6.2.6, the permittee shall maintain daily record of assist gas (natural gas) flow rate fed to the flare.  
**[45CSR§30-5.1.c] [F1]**

## **6.5. Reporting Requirements**

6.5.1. The permittee shall submit by March 31<sup>st</sup> of the following year, an emission summary for the dehydration unit (DEHY), which incorporates the wet gas testing results required by 6.3.1. The permittee shall also supply a copy of the most recent report within the facility's subsequent Title V renewal application. These reports shall include an actual annual average emission estimate for the calendar year of the sample, modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 6.2.5. The permittee shall also supply all supporting documentation where site specific operating parameters are tabulated to define the annual average values. The report shall incorporate a copy of the lab analysis obtained from the wet gas testing as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized. Additionally, the permittee shall identify where the compressor station is located with respect to a custody transfer point, which is referenced within 40 C.F.R 63, subpart HH as the point where the gas enters into a natural gas transmission and/or storage pipeline. This report shall be signed by a responsible official upon submittal.  
**[45CSR§30-5.1][DEHY]**

## **6.6. Compliance Plan**

6.6.1. In accordance with the GLYCalc emissions report submitted on September 6, 2011 to WVDAQ as part of the Title V renewal application, the permittee shall update their associated 45CSR13 permit (R13-2585B) to reflect the change in emissions as predicted using the recent wet gas analysis taken on August 1, 2011. An application for a Title V/Rule 13 modification permit shall be submitted to WVDAQ within 90 days of this Title V permit issuance.



## **7.0 Northwest Lot 50 Barrel Tanks (2) [TKO-1 and TKO-2]**

### **7.1 Limitations and Standards**

- 7.1.1. The facility shall install carbon filter on the two (2) Northwest Lot 50 Barrel Tanks.  
[45CSR13, R13-2585, 8.1.1]

### **7.2 Monitoring Requirements**

- 7.2.1. The permittee shall monitor the tanks for the presence of odors on a weekly basis by observation.  
[45CSR13, R13-2585, 8.2.1]

### **7.3 Testing Requirements**

Please see Facility-wide testing requirements.

### **7.4 Recordkeeping Requirements**

- 7.4.1. The permittee shall maintain records on the tanks that include the date the carbon filters were replaced.  
[45CSR13, R13-2585, 8.4.1]
- 7.4.2. The permittee shall maintain records on a weekly basis stating if any odors were detected from the tanks.  
[45CSR13, R13-2585, 8.4.2]
- 7.4.3. The permittee shall maintain records on any corrective actions taken to correct any odor issues present from the tanks.  
[45CSR13, R13-2585, 8.4.3]

### **7.5 Reporting Requirements**

Please see Facility-wide reporting requirements.

### **7.6 Compliance Plan**

N/A

## 8.0 Emergency Generator (EG-1)

### 8.1 Limitations and Standards

8.1.1. The facility shall employ a natural gas driven emergency generator identified as EG-1. The operation of this equipment shall not exceed the following maximum operating and emission limitations:

- a. The engine shall be limited to operate solely on pipeline quality natural gas with a maximum power output of 155.2 hp.
- b. Emissions released from the generator engine shall not exceed the limits set forth below:

| Emission Source ID | Pollutant        | Emission Rates |                            |
|--------------------|------------------|----------------|----------------------------|
|                    |                  | Hourly (lb/hr) | Annual*<br>(tons per year) |
| EG-1               | PM <sub>10</sub> | 0.01           | 0.003                      |
|                    | SO <sub>2</sub>  | <0.001         | <0.001                     |
|                    | NO <sub>x</sub>  | 0.04           | 0.01                       |
|                    | CO               | 0.06           | 0.02                       |
|                    | VOC              | 0.13           | 0.03                       |

\*Based on annual operation of 500 hours.

- c. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours per year.
- d. The engine may be operated up to 50 hours per year in non-emergency situations, but those hours are counted towards the 100 hour maximum.
- e. There is no time limit on the use of the engine in emergency situations.

[45CSR13, R13-2585, 9.1.1]

8.1.2. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11.] [45CSR13, R13-2585, 9.1.1]

8.1.3. The emergency generator (EG-1) is subject to the requirements of 40 C.F.R. 63, Subpart ZZZZ. EG-1 is a new stationary RICE located at an area source and shall meet the requirements of 40 C.F.R. 63, Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60, Subpart JJJJ for spark ignition engines. See Section 9.0.

[40 C.F.R. §63.6590(c)]

## **8.2. Monitoring Requirements**

- 8.2.1. For the purposes of demonstrating compliance with the limitations of condition 8.1.1. of this permit, the permittee shall monitor and record the hours of operation and amount of fuel consumed by the generator engine on a daily basis. Such shall be maintained according to condition 3.4.2. of this permit.  
[45CSR13, R13-2585 9.2.1]

## **8.3. Testing Requirements**

Please see Facility-wide testing requirements.

## **8.4. Recordkeeping Requirements**

- 8.4.1. For the purposes of determining compliance with maximum throughput limit set forth in 8.1.1 the applicant shall maintain daily and monthly records to be certified upon completion. These records shall be maintained on-site for a period of five (5) years and be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request.  
[45CSR13, R13-2585, 9.4.4]

## **8.5. Reporting Requirements**

Please see Facility-wide reporting requirements.

## **8.6. Compliance Plan**

N/A

## 9.0. 40CFR60, Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EG-1)

### 9.1. Limitations and Standards

*[Reserved]*

### 9.2. Emission Standards for Owners and Operators

- 9.2.1 Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to 40CFR60, Subpart JJJJ for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to 40CFR60, Subpart JJJJ, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. [40CFR§60.4233(e)] [45CSR16] [45CSR13, R13-2585, 10.2.1]

**Table 1 to Subpart JJJJ of Part 60—NO<sub>x</sub>, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP**

| Engine type and fuel | Maximum engine power | Manufacture date | Emission standards <sup>a</sup> |     |                  |                             |     |                  |
|----------------------|----------------------|------------------|---------------------------------|-----|------------------|-----------------------------|-----|------------------|
|                      |                      |                  | g/HP-hr                         |     |                  | ppmvd at 15% O <sub>2</sub> |     |                  |
|                      |                      |                  | NO <sub>x</sub>                 | CO  | VOC <sup>d</sup> | NO <sub>x</sub>             | CO  | VOC <sup>d</sup> |
| Emergency            | HP≥130               |                  | 2.0                             | 4.0 | 1.0              | 160                         | 540 | 86               |

<sup>a</sup>Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O<sub>2</sub>.

<sup>d</sup>For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

- 9.2.2 Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40CFR§60.4233 over the entire life of the engine. [40CFR§60.4234] [45CSR16] [45CSR13, R13-2585, 10.2.2]

### 9.3. Other Requirements for Owners and Operators

- 9.3.1 For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in 40CFR§60.4233 after January 1, 2011. [40CFR§60.4236(c)] [45CSR16] [45CSR13, R13-2585, 10.3.1]

### 9.4. Compliance Requirements for Owners and Operators

- 9.4.1. If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in 40CFR§60.4233(a) through (c), the

permittee must comply by purchasing an engine certified to the emission standards in 40CFR§60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. The permittee must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the permittee's stationary SI internal combustion engine will not be considered out of compliance. In addition, the permittee must meet one of the following requirements specified below:

- a. If the permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if the permittee is an owner or operator.
- b. If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee's engine will be considered a non-certified engine, and the permittee must demonstrate compliance according to the following:
  1. If the permittee is an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

**[40CFR§60.4243(a)] [45CSR16] [45CSR13, R13-2585, 10.4.1]**

- 9.4.2. If the permittee is an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40CFR§60.4233(d) or (e), the permittee must demonstrate compliance according to one of the methods specified below:
  - a. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in 9.4.1.
  - b. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40CFR§60.4233(d) or (e) and according to the requirements specified in 40CFR§60.4244, as applicable, and according to the following:
    1. If the permittee is an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance.

**[40CFR§60.4243(b)] [45CSR16] [45CSR13, R13-2585, 10.4.2]**

- 9.4.3. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided

for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

**[40CFR§60.4243(d)] [45CSR16] [45CSR13, R13-2585, 10.4.3]**

- 9.4.4. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40CFR§60.4233.

**[40CFR§60.4243(e)] [45CSR16] [45CSR13, R13-2585, 10.4.4]**

- 9.4.5. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

**[40CFR§60.4243(g)] [45CSR16] [45CSR13, R13-2585, 10.4.5]**

## **9.5. Testing Requirements for Owners and Operators**

*[Reserved]*

## **9.6. Notification, Reports, and Records for Owners and Operators**

- 9.6.1. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

- a. Owners and operators of all stationary SI ICE must keep records of the information specified below:

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.
2. Maintenance conducted on the engine.
3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048.
4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40CFR§60.4243(a)(2), documentation that the engine meets the emission standards.

**[40CFR§60.4245(a)]**

- b. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

**[40CFR§60.4245(b)]**

- c. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40CFR§60.4244 within 60 days after the test has been completed. **[40CFR§60.4245(d)]**

**[45CSR16] [45CSR13, R13-2585, 10.6.1]**

**10.0. 40CFR63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [Engines #1, 2, 3 & 4 (Emission point ID(s): 001-02, 001-03, 001-05 & 001-06)]**

(Note: In this section “this subpart” refers to 40 C.F.R. 63 Subpart ZZZZ)

**10.1. Limitations and Standards**

10.1.1. §63.6595 When do I have to comply with this subpart? (Note: The following section numbers match those of 40 C.F.R. §63.6595)

- (a) *Affected sources.* (1) If you have an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.
- (c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

**[40 C.F.R. §63.6595]**

10.1.2. §63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions? (Note: The following section numbers match those of 40 C.F.R. §63.6603)

- (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart.

Table 2d to Subpart ZZZZ of Part 63— Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

| For each . . .   | You must meet the following requirement, except during periods of startup . . .   | During periods of startup you must . . . |
|--|---|--|
| 6. Non-emergency, non-black start 2SLB stationary RICE | a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>1</sup>                    |  |
|  | b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and                               |  |
| For each . . .   | You must meet the following requirement, except during periods of startup . . .   | During periods of startup you must . . . |
|  | c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. |  |

<sup>1</sup>Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart. **[40 C.F.R. §63.6603; Table 2d of 40 C.F.R. 63 Subpart ZZZZ]**

10.1.3. §63.6605 What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
- (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**[40 C.F.R. §63.6605]**

10.1.4. § 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations? (Note: The following section numbers match those of 40 C.F.R. §63.6640)

- (a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.
- (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650.
- (e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

**[40 C.F.R. §63.6640]**

10.1.5. § 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.  
**[40 C.F.R. §63.6665]**

**10.2. Monitoring Requirements**

10.2.1. § 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements? (Note: The following section numbers match those of 40 C.F.R. §63.6625)

- (e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
  - (5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;



- (h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
- (j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

**[40 C.F.R. §63.6625]**

**10.3. Testing Requirements**

10.3.1. N/A

**10.4. Recordkeeping Requirements**

10.4.1. § 63.6655 What records must I keep? (Note: The following section numbers match those of 40 C.F.R. §63.6655)

- (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.
  - (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
  - (2) Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.
  - (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
  - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
  - (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

**[40 C.F.R. §63.6655]**

**10.5. Reporting Requirements**

10.5.1. § 63.6645 What notifications must I submit and when? (Note: The following section numbers match those of 40 C.F.R. §63.6645)

- (a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
  - (2) An existing stationary RICE located at an area source of HAP emissions.

**[40 C.F.R. §63.6645]**

**10.6. Compliance Plan**

10.6.1. N/A

## 11.0. 40CFR63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [Engines CE-5 & CE-6 (Emission point ID(s): 001-10 & 001-11)]

(Note: In this section “this subpart” refers to 40 C.F.R. 63 Subpart ZZZZ)

### 11.1. Limitations and Standards

11.1.1. §63.6595 When do I have to comply with this subpart? (Note: The following section numbers match those of 40 C.F.R. §63.6595)

- (a) *Affected sources.* (1) If you have an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.
- (c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

#### [40 C.F.R. §63.6595]

11.1.2. §63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions? (Note: The following section numbers match those of 40 C.F.R. §63.6603)

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

- (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

Table 2b to Subpart ZZZZ of Part 63— Operating Limitations for Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

You must comply with the following operating limitations for existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

| For each . . .   | You must meet the following operating limitation . . .   |
|--|--|
| 1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst | a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and<br>b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. <sup>1</sup> |

| For each . . .   | You must meet the following operating limitation . . .               |
|--|--|
| 2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst | Comply with any operating limitations approved by the Administrator. |

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

Table 2d to Subpart ZZZZ of Part 63— Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

You must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

| For each . . .   | You must meet the following requirement, except during periods of startup . . .                           | During periods of startup you must . . . |
|--|---|--|
| 8. Non-emergency, non-black start 4SLB stationary RICE >500 HP | a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O <sub>2</sub> ; or |  |
|  | b. Reduce CO emissions by 93 percent or more.   |  |

**[40 C.F.R. §63.6603, Tables 2b and 2d of 40 C.F.R. 63 Subpart ZZZZ ]**

11.1.3. §63.6605 What are my general requirements for complying with this subpart? (Note: The following section numbers match those of 40 C.F.R. §63.6605)

- (a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
- (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**[40 C.F.R. §63.6605]**

11.1.4. § 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?  
(Note: The following section numbers match those of 40 C.F.R. §63.6630)

- (a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.
- (b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.
- (c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

**[40 C.F.R. §63.6630]**

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

| For each . . .   | Complying with the requirement to . . .                                      | You have demonstrated initial compliance if. . .  |
|--|--|---|
| 1. existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Reduce CO emissions and using oxidation catalyst, and using a CPMS        | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and<br>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and<br>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| 2. existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and<br>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and<br>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.    |

| For each . . .   | Complying with the requirement to . . .                            | You have demonstrated initial compliance if. . .   |
|--|--|--|
| 3. existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Reduce CO emissions and not using oxidation catalyst            | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and<br>ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and<br>iii. You have recorded the approved operating parameters (if any) during the initial performance test.  |
| 4. existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Limit the concentration of CO, and not using oxidation catalyst | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and<br>ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and<br>iii. You have recorded the approved operating parameters (if any) during the initial performance test.   |
| 5. existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Reduce CO emissions, and using a CEMS                           | i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and<br>ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and<br>iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period. |

| For each . . .   | Complying with the requirement to . . .            | You have demonstrated initial compliance if . . .   |
|--|--|---|
| 6. existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Limit the concentration of CO, and using a CEMS | i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and<br>ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and |
|  |  | iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.                 |

11.1.5. § 63.6635 How do I monitor and collect data to demonstrate continuous compliance? (Note: The following section numbers match those of 40 C.F.R. §63.6635)

- (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

**[40 C.F.R. §63.6635]**

11.1.6. § 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations? (Note: The following section numbers match those of 40 C.F.R. §63.6640)

- (a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.
- (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish

the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

- (e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

**[40 C.F.R. §63.6640]**

11.1.7. § 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.  
**[40 C.F.R. §63.6665]**

**11.2. Monitoring Requirements**

11.2.1. § 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?  
(Note: The following section numbers match those of 40 C.F.R. §63.6625)

- (a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.
- (1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.
- (2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
- (3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.
- (4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.
- (b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (5) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.
- (1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.



- (i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
  - (ii) Sampling interface ( *e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;
  - (iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;
  - (iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3); and
  - (v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).
- (2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
- (3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).
- (4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
- (5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
- (6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.
- (h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

**[40 C.F.R. §63.6625]**

**11.3. Testing Requirements**

- 11.3.1. § 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE located at an area source of HAP emissions? (Note: The following section numbers match those of 40 C.F.R. §63.6612)

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

- (a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

- (b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.
  - (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
  - (2) The test must not be older than 2 years.
  - (3) The test must be reviewed and accepted by the Administrator.
  - (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

**[40 C.F.R. §63.6612]**

11.3.2. § 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

**[40 C.F.R. §63.6615]**

11.3.3. § 63.6620 What performance tests and other procedures must I use?

You must conduct each performance test according to Tables 3 and 4 of this subpart that applies to you and in accordance with 40 C.F.R. § 63.6620.

**[40 C.F.R. §63.6620]**

**11.4. Recordkeeping Requirements**

11.4.1. § 63.6655 What records must I keep?

- (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section. (Note: The following section numbers match those of 40 C.F.R. §63.6655)
  - (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
  - (2) Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.
  - (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
  - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.
  - (1) Records described in §63.10(b)(2)(vi) through (xi).
  - (2) Previous ( *i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
  - (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

**[40 C.F.R. §63.6655]**

**11.5. Reporting Requirements**

- 11.5.1. § 63.6645 What notifications must I submit and when? (Note: The following section numbers match those of 40 C.F.R. §63.6645)
- (a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
    - (2) An existing stationary RICE located at an area source of HAP emissions.
  - (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).
  - (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).
    - (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
    - (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

**[40 C.F.R. §63.6645]**

- 11.5.2. § 63.6650 What reports must I submit and when? (Note: The following section numbers match those of 40 C.F.R. §63.6650)
- (a) You must submit each report in Table 7 of this subpart that applies to you.

- (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.
  - (1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.
  - (2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.
  - (3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
  - (4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
  - (5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.
  - (6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.
  - (7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.
  - (8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
  - (9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
- (c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.
  - (1) Company name and address.
  - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
  - (3) Date of report and beginning and ending dates of the reporting period.
  - (4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting

- period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.
- (5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.
  - (6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.
- (1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
  - (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.
- (1) The date and time that each malfunction started and stopped.
  - (2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
  - (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
  - (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
  - (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
  - (7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
  - (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

- (9) A brief description of the stationary RICE.
- (10) A brief description of the CMS.
- (11) The date of the latest CMS certification or audit.
- (12) A description of any changes in CMS, processes, or controls since the last reporting period.
- (f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

**[40 C.F.R. §63.6650]**

**11.6. Compliance Plan**

N/A